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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/502,048	07/30/2004	Masayuki Orihashi	P25670	2146
7055 7590 09/23/2008 GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE RESTON, VA 20191				
EXAMINER KANE, CORDELLA P				
ART UNIT 2132		PAPER NUMBER		
NOTIFICATION DATE 09/23/2008		DELIVERY MODE ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/502,048

Applicant(s)

ORIHASHI ET AL.

Examiner

CORDELIA KANE

Art Unit

2132

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 June 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 3-9 and 13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3-9 and 13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-8508)
Paper No(s)/Mail Date 8/5/08
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Inventor's Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1, 3 – 9, and 13 have been considered but are moot in view of the new grounds of rejection.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 102

3. Claims 1,3, 4, 9 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Hassan et al's US Patent 5,604,806. Referring to claim 1, Hassan teaches:
 - a. A propagation reference signal generating section that generates a first reference signal to enable a communicating party to estimate a propagation environment, and transmitting section that transmits the first reference signal (column 7, lines 35-40).
 - b. A propagation estimating section that estimates a first propagation estimation value of the propagation environment using a second reference signal transmitted from the communicating party (column 8, lines 40-44).
 - c. A first data acquiring section that generates first data using the first propagation section estimation value (column 9, lines 16-20).
 - d. A decoding section that decodes a transmission signal encoded using a second propagation estimation value that is estimated by the communicating party using the first reference signal, to obtain second data using the first data (column 18, lines 32-37).

4. Referring to claim 3, Hassan teaches:
 - e. A coding section that encodes the first propagation estimation value obtained in the propagation estimating section wherein the first data acquiring section generates the first data from an encoding pattern of the encoded first propagation estimation value (column 9, lines 12-20).
5. Referring to claim 4, Hassan teaches:
 - f. Comparing the first propagation estimation value obtained for each channel with one another when a plurality of channels are received (column 9, lines 6-10).
 - g. Wherein based on the comparison result generates the first data (column 9, lines 12-20).
6. Referring to claim 9, Hassan teaches:
 - h. A first communication apparatus, and a second communication apparatus that is a communicating party of the first communication apparatus (column 6, line 66-column 7, line 2), wherein said first communication apparatus comprises:
 - i. A first reference signal generating section that generates a first reference (column 7, lines 38-39).
 - ii. A transmitting section that transmits the first reference signal (column 7, lines 34-35).
 - iii. A first propagation estimating section that estimates a first propagation estimation value of a propagation environment using a

second reference signal transmitted from the second communication apparatus (column 8, lines 40-44).

iv. A first acquiring section that generates first data using the first propagation estimation value (column 9, lines 16-20).

v. A decoding section that decodes an encoded signal transmitted from the second communication apparatus to obtain second data using the first data (column 18, lines 32-37).

i. The second communication apparatus comprising:

vi. A second reference signal generating section that generates the second reference signal (column 7, lines 38-39).

vii. A second propagation estimating section that estimates a second propagation estimation value of the a propagation environment using the received first reference signal (column 8, lines 40-44).

viii. A second acquiring section that generates third data using the second propagation estimation value (column 9, lines 16-20).

ix. A coding section that encodes the second data and generates the encoded signal using the third data (column 18, lines 32-35).

7. Referring to claim 13, Hassan teaches:

j. Generating a first reference signal to enable a communicating party to estimate a propagation environment between the first communicating apparatus and the second, and transmitting section that transmits the first reference signal (column 7, lines 35-40).

- k. Estimating, in the second apparatus, a first propagation estimation value of the propagation environment using the first reference signal (column 8, lines 40-44).
- l. Generating, in the second communication apparatus, first data using the first propagation section estimation value (column 9, lines 16-20).
- m. Encoding second data and generating an encoded signal using the first data (column 18, lines 32-35).

Claim Rejections - 35 USC § 103

- 8. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hassan as applied above, and further in view of Lender (U.S. Pat. No. 3,633,105 – cited on PTO-892 in previous action).
- 9. Hassan discloses all the limitations of the parent claim. Hassan does not explicitly disclose equalizing the received signal based on the estimation value to acquire second data. However, Lender discloses equalizing signals to correct for the distortion effects of the transmission channel (column 1, lines 5-10). Hassan and Lender are analogous art because they are from the same field of endeavor, signals. At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Hassan and Lender before him or her, to modify the system of Hassan to include the equalization of Lender. The suggestion/motivation for doing so would have been to correct for the distortion effects of the transmission channel (column 1, lines 5-10).

Allowable Subject Matter

10. Claims 5 – 7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CORDELIA KANE whose telephone number is (571)272-7771. The examiner can normally be reached on Monday - Thursday 8:00 - 5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/C. K./
Examiner, Art Unit 2132

/Gilberto Barron Jr/
Supervisory Patent Examiner, Art Unit 2132